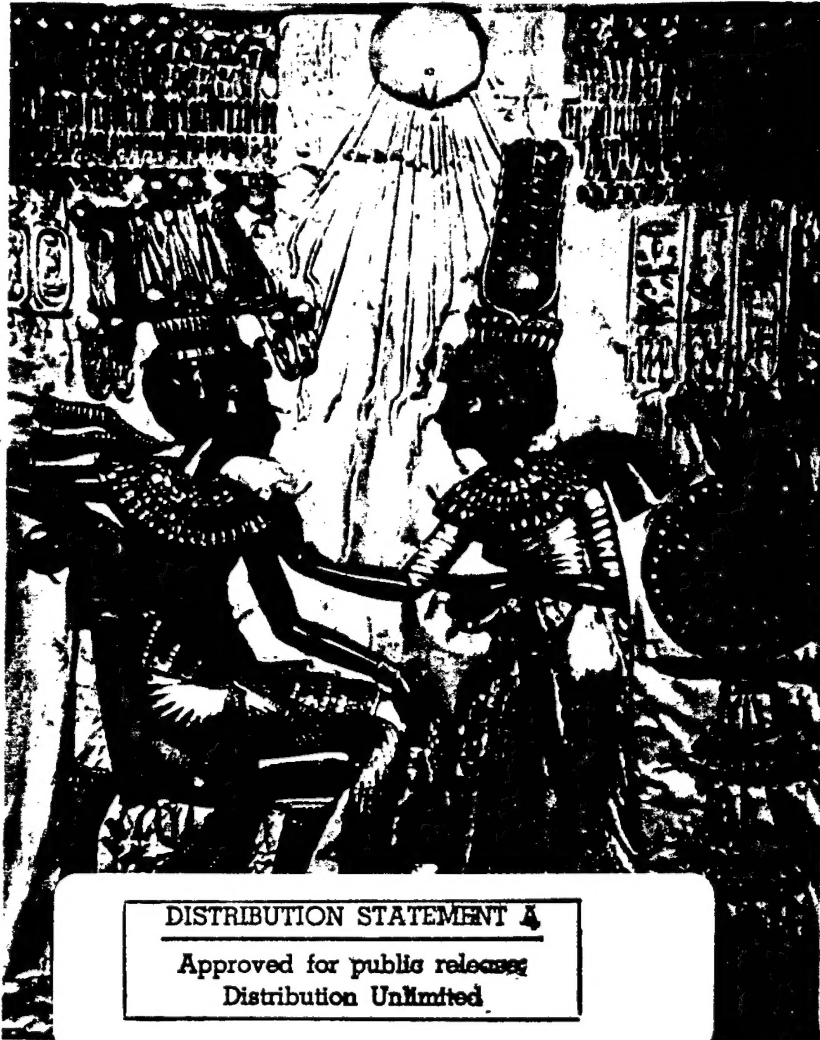




**3 RD. INTERNATIONAL CONFERENCE  
SOLAR ENERGY STORAGE AND  
APPLIED PHOTOCHEMISTRY,  
Cairo, Egypt  
8 - 14 January 1995**

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# REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)

2. REPORT DATE

22 February 1995

3. REPORT TYPE AND DATES COVERED

Conference Proceedings

4. TITLE AND SUBTITLE

3rd International Conference on Solar Energy Storage and Applied Photochemistry

5. FUNDING NUMBERS

F6170895W0084

6. AUTHOR(S)

Conference Committee

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Photoenergy Center  
Ain Shams Univeristy  
Abbassia, Cairo  
Egypt8. PERFORMING ORGANIZATION  
REPORT NUMBER

N/A

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

EOARD  
PSC 802 BOX 14  
FPO 09499-020010. SPONSORING/MONITORING  
AGENCY REPORT NUMBER

CSP 95-1005

11. SUPPLEMENTARY NOTES

3 documents - Program, List of Participants, Abstracts

12a. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited.

12b. DISTRIBUTION CODE

A

13. ABSTRACT (Maximum 200 words)

The Final Proceedings for 3rd International Conference on Solar Energy and Applied Photochemistry, 8 January 1995 - 14 January 1995

14. SUBJECT TERMS

Nil

15. NUMBER OF PAGES

11, 39, 153

16. PRICE CODE

N/A

17. SECURITY CLASSIFICATION  
OF REPORT

UNCLASSIFIED

18. SECURITY CLASSIFICATION  
OF THIS PAGE

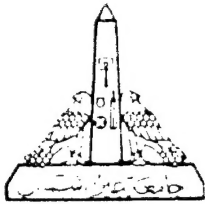
UNCLASSIFIED

19. SECURITY CLASSIFICATION  
OF ABSTRACT

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20. LIMITATION OF ABSTRACT

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Photoenergy Centre  
Faculty of Science  
Abbassia, Cairo, Egypt

**3rd INTERNATIONAL  
CONFERENCE**

**SOLAR ENERGY  
STORAGE & APPLIED  
PHOTOCHEMISTRY**

**8-14 January 1995**

**Honorary Presidents of the  
Conference**

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The President of Ain Shams University

**Rabie A. M.**

The Dean, Faculty of Science

**Organized by**

**PHOTOENERGY CENTRE  
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CAIRO, EGYPT**



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**3rd INTERNATIONAL  
CONFERENCE**

**SOLAR ENERGY  
STORAGE & APPLIED  
PHOTOCHEMISTRY**

**8-14 January 1995**

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AGENCY

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MINISTRY OF SCIENTIFIC RESEARCH  
MINISTRY OF INTERNATIONAL  
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The President of Ain Shams University

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**Cosponsored by**

MINISTRY OF EDUCATION  
MINISTRY OF PETROLEUM,

**Dear Friends and Colleagues**

The Conference (Solar '95) is almost upon us. The provisional program has been already distributed. Details will be made available upon arrival. If you have not registered yet, early registration is advisable. We plan to pick you up from the Cairo International Airport. Therefore, please provide us with details of your flight.

In our planning we have tried to maintain a strong focus on our chosen theme-Photochemical Storage of Solar Energy and applied Photochemistry. We are committed to providing an array of presentations that meet the interests of photoscientists.

Looking very much forward to seeing you in Cairo very soon.

***Abdel-Mottaleb, M.S.A.***

Chairman, Organising Committee

## PROGRAMME STRUCTURE

The scientific programme consists of:

\* **plenary** (PL- 45 Mins.), **keynote** (KL- 35 mins.) lectures and **short talks** (ST- 25 mins.) plus 10 mins. for discussions.

\* **poster sessions.** Poster format is 120 cm high x 75 cm width.

\* **an exhibition,** companies interested in exhibiting products (instruments, books, magazines, computer software, video's, etc.) should contact the chairman of the organizing committee. Space is on a first come first served basis and is limited.

An outstanding list of speakers has been assembled, addressing topics of general interests and of applied nature:

**ABD EL AZZIZ, A. S. (CANADA)**

PHOTOLYSIS OF POLYAROMATIC ETHERS AND THIOETHERS WITH PENDANT CYCLOPENTADIENYLIRON MOIETIES

**AL-HASSAN, K. (JORDAN)**

FREE VOLUME SENSING FLUORESCENCE "TICT" PROBES FOR CYCLODEXTRINS INTERIOR

**ALI, S. I. (INDIA)**

PHOTOEXCITATION OF TRANSITION

METAL COMPLEXES IN ORGANIC SUBSTRATES

**ALONSO-VANTE, N. (GERMANY)**

THE SIGNIFICANCE OF SURFACE STATES FOR PHOTOELECTROCATALYSIS AT THE SEMICONDUCTOR/ELECTROLYTE INTERFACES

**AZUMI T (JAPAN),**

**BADR, M. Z. (EGYPT)**

PHOTOLYSIS AND PYRROLYSIS OF ACID AMIDES AND SULPHONAMIDES; MECHANISTIC STUDIES

**BILLING, R. (GERMANY)**

SELECTIVE OXIDATION OF ALCOHOLS BY DIPHENYLIODONIUM IONS IN A PHOTOINDUCED CHAIN REACTION

**BOLTON, J. (CANADA)**

SOLAR DETOXIFICATION OF WASTE WATER

**BOXER, S. (USA)**

MECHANISM OF THE EARLY STEPS IN PHOTOSYNTHESIS

**BRASLAVSKY, S. (GERMANY),**

TIME-RESOLVED PHOTOTHERMAL MEASUREMENTS ON BIOLOGICAL PHOTORECEPTORS

**CALDWELL, R. (USA)**

APPLICATIONS OF TIME-RESOLVED PHOTOACOUSTIC CALORIMETRY IN

## ORGANIC CHEMISTRY

**CALZAFERRI, G. (ZWITZERLAND)**  
DYE MOLECULES IN ZEOLITES AS  
ARTIFICIAL ANTENNA SYSTEMS

**DE SCHRYVER, F. C. (BELGIUM)**

**DOEPP, D. (GERMANY)**  
REGIO- AND STEREOSELECTIVITY IN  
LIGHT INDUCED [4+2]-CYCLOADDITIONS  
OF ALPHA-CYANOENAMINES TO  
AROMATIC CARBONYL COMPOUNDS,  
NITRILES AND HYDROCARBONS

**DUERR, H. (GERMANY)**  
MOLECULAR AND SUPRAMOLECULAR  
SYSTEMS IN PHOTOCHROMISM

**EL-SAYED, M. A. (USA)**

**ESPLUGAS, S. (SPAIN)**  
DESTRUCTION OF WATER  
CONTAMINANTS USING UV/ OXIDANT  
METHODS

**ETMAN, M. (FRANCE)**  
PHOTOELECTROCHEMICAL STUDIES ON  
ANODIC DISSOLUTION OF Si  
SEMICONDUCTORS

**FARA, L. (ROMANIA)**  
PHOTOPHYSICAL & PHOTOCHEMICAL  
PROPERTIES OF DYE MOLECULES IN  
POLYMERS USED FOR FLUORESCENT  
SOLAR CONCENTRATORS.

**FITZMAURICE, D. (IRELAND)**  
HETROSUPRAMOLECULAR CHEMISTRY:  
AN APPROACH TO MODULATING  
FUNCTION IN MOLECULAR DEVICES.

**FUJIMURA Y (JAPAN)**

**GEORGE, K. (INDIA)**  
METAL RECOGNITION AND PHOTO -  
SENSITIZING PROPERTIES OF NOVEL  
SQUARINE DYES

**GETOFF, N. (AUSTRIA)**

**GILBERT, A. (UK)**  
PHOTOCHEMISTRY AS A CLEAN  
TECHNOLOGY FOR SYNTHESIS OF  
EFFECT CHEMICALS

**GREVELS, F. (GERMANY)**  
PHOTOLYSIS OF GROUP 8 METAL  
CARBONYLS: TRANSIENT IR  
SPECTROSCOPY, PHOTOKINETICS AND  
QUANTUM YIELDS OF CO SUBSTITUTION

**GRAETZEL, M. (SWITZERLAND)**  
NANOCRYSTALLINE SOLAR CELLS;  
SCIENTIFIC PRINCIPLES AND ECONOMIC  
PERSPECTIVES

**GUILLET, J. (CANADA)**  
SOLAR SYNTHESIS OF HYDROGEN  
PEROXIDE

**HARRIMAN, A. (USA)**  
PHOTOCHEMOTHERAPY WITH CYANINE  
DYES

**HAU, D.-M. (TAIWAN)**

PHOTOCHEMOTHERAPY ON  
EXPERIMENTAL TUMOR WITH  
PHOTOFRIN II AND LASER

**HILL, C. (USA)**

EXCITED STATE CHARACTERISTICS AND  
NEW UNACTIVATED C-H BOND  
FUNCTIONALIZATION PHOTOCATALYSIS  
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**HOFFMAN, M. (USA)**

ELECTROLYTE AND TEMPERATURE  
EFFECTS IN PHOTOINDUCED  
INTRAMOLECULAR ELECTRON-  
TRANSFER REACTIONS

**KHAN, M. K. A. (BANGLADESH)**

STUDY OF A CuO<sub>2</sub> BASED  
PHOTOELECTROCHEMICAL SOLAR  
CELLS

**KOSSANYI, J. (FRANCE)****KRISHNAN, V. (INDIA)**

NON-PLANAR PORPHYRIN MOLECULAR  
ASSEMBLIES

**KORPPI-TOMMOLA, J. (FINLAND)**

SELFORGANIZATION OF CHLOROPHYLLS  
IN HYDROCARBON SOLUTION AND IN  
VIVO SYSTEMS: PICO- AND  
FEMTOSECOND RELAXATION IN WATER  
BOUND CHLA AGGREGATES AND CL.  
TEPIDUM CHLOROSOMES

**KURRECK, H. (GERMANY)**

MIMICKING PRIMARY PROCESSES OF  
PHOTOSYNTHESIS MODEL COMPOUNDS,  
LIGHT-INDUCED CHARGE SEPARATION.

**KUZMIN, M. (RUSSIA)**

PHOTOINDUCED PROTON TRANSFER IN  
ORGANIZED MOLECULAR SYSTEMS

**LEUPOLD, D. (GERMANY)**

CHARACTERIZATION OF  
PHOTOSYNTHETIC ANTENNAS BY  
NONLINEAR POLARIZATION  
SPECTROSCOPY (FREQUENCY DOMAIN)

**LOEHMANN-SROEBEN, H.-G. (GERMANY)**

FLUORESCENCE OF POLYNUCLEAR  
AROMATIC COMPOUNDS AND MINERAL  
OILS IN ENVIRONMENTAL MONITORING

**LOUTFY, R. O. (CANADA)****MASUHARA, H. (JAPAN)****MAZZUCATO, U. (ITALY)**

PHOTOCHROMIC MATERIALS: A  
COMPREHENSIVE KINETIC  
THERMODYNAMIC AND  
PHOTOCHEMICAL STUDY

**MELE, A. (ITALY)**

PULSED LASER ABLATION: THIN FILM  
PRODUCTION AND COATING, PROCESS  
DIAGNOSTICS



**MEMMING, R. (GERMANY)**

**MORRISON, H. (USA)**

PHOTOCHEMICAL REARRANGEMENTS  
OF OXAZIRIDINES

**NAVIO, J. A. (SPAIN)**

PHOTODEGRADATION OF BUTYL TIN  
COMPOUNDS IN WATER:  
ENVIRONMENTAL IMPLICATIONS

**OPPENLAENDER, T. (GERMANY)**

NOVEL VACUUM-UV-(VUV) AND UV-  
EXCIMER FLOW THROUGH  
PHOTORECTORS FOR WAST WATER  
TREATMENT AND FOR WAVELENGTHS  
SELECTIVE PHOTOCHEMISTRY

**OZANAM, F. (FRANCE)**

IN-SITU INFRARED STUDY OF THE  
INTERFACIAL LAYER DURING THE  
ANODIC DISSOLUTION OF A SILICON  
ELECTRODE IN A FLUORIDE  
ELECTROLYTE

**RAHMAN, N. (ITALY)**

**SABBATINI, N. (ITALY)**

LUMINESCENCE OF INCLUSION  
COMPLEXES OF LANTHANIDE IONS

**SONG, P.-S. (USA)**

PHYTOCHROME AS LIGHT SENSOR FOR

PHOTOSYNTHETIC GENE ACTIVATION

**SPANHEL, L. (GERMANY)**

SOL-GEL SYNTHESIS AND  
SPECTROSCOPIC PROPERTIES OF  
NANOSCALED HYBRID MATERIALS

**TAKASHI, I. (JAPAN)**

PHOTOCATALYTIC REDUCTION OF  
CARBON DIOXIDE WITH WATER

**TERENETSKAYA, I. (UKRAINE)**

AN IN VITRO MODEL OF PREVITAMIN D  
PHOTOSYNTHESIS AS POSSIBLE  
MONITOR OF SOLAR UVB RADIATION:  
KINETIC STUDIES USING TUNABLE  
LASER

**TESTA, A. (USA)**

PHOTOINDUCED PROTON TRANSFER IN  
SUBSTITUTED PYRIDINES

**TOLBERT, L. (USA)**

EXCITED-STATE PROTON TRANSFER IN  
CONSTRAINED ENVIRONMENT

**TOKUMARU, K. (JAPAN)**

ROLE OF HIGHER EXCITED STATES IN  
ORGANIC PHOTOCHEMISTRY

**TRIBUTSCH, H. (GERMANY)**

PHOTOCHEMICAL ENERGY  
CONVERSION: IRREVERSIBILITY AS A  
CHANCE

**TROZZOLO A (USA)**

CREATION AND DETECTION OF

**REVERSIBLE PHOTOCHEMICALLY  
GENERATED INTERMEDIATES**

**WAGNER, P. J. (USA)**

TRIPLET STATE RADICAL CLEAVAGE OF  
RING SUBSTITUENTS ON PHENYL  
KETONES: DIFFERENT MODES FOR  
DIFFERENT ELECTRONIC STATES

**WILLIG, F. (GERMANY)**

INJECTION AND DISCHARGE OF PHOTO-  
GENERATED CHARGE CARRIERS AT THE  
SEMICONDUCTOR/ ELECTROLYTE  
INTERFACE

**WELLER, A. (GERMANY)**

PHOTOINDUCED ELECTRON TRANSFER  
REACTION IN FLEXIBLE LINKED  
DONOR-ACCEPTOR SYSTEMS

**WILKINSON, F. (UK)**

**WULFMAN, C. (USA)**

CATASTROPHIC POLARIZATION OF  
TWISTED EXCITED STATES

**YAMAUCHI, S. (JAPAN)**

TIME-RESOLVED EPR STUDIES ON THE  
EXCITED POLYMERS OF SANDWICH  
PARALLEL TYPE IN PORPHYRINS AND  
PHTHALOCYANINES

**YANAGIDA, S. (JAPAN)**

PHENAZINE-PHOTOSENSITIZED  
REDUCTION OF CO<sub>2</sub> MEDIATED BY  
COBALTCYCLAM COMPLEXES

**ZACHARIASSE, K. A. (GERMANY)**

INFLUENCE OF ENERGY GAP  $\Delta E(S_1, S_2)$  AND AMINO N-INVERSION IN  
INTRAMOLECULAR CHARGE TRANSFER.  
DUAL FLUORESCENCE AND SINGLE CT-  
EMISSION

**ZENKEVICH, E. I. (BELARUS)**

DIPOLE-DIPOLE AND EXCHANGE  
ENERGY TRANSFER IN DIFFERENT  
TYPES OF PORPHYRIN CHEMICAL  
DIMERS

**ZEWAIL, A. H. (USA)**

**ZIMMERMAN, H. (USA)**

RECENT ADVANCES IN MECHANISTIC  
AND EXPLORATORY ORGANIC  
PHOTOCHEMISTRY

**BOOK OF ABSTRACTS**

The abstracts of all contributions will be  
compiled in the Book of Abstracts,  
which will be distributed to all  
participants upon arrival.

**CONFERENCE PROCEEDINGS**

The conference proceedings will be  
published in the Proceedings of the  
Indian Academy of Sciences, Chemical  
Sciences. Full papers (maximum of 15  
pages' A4 format) will be published in  
the proceedings of the conference. It is  
expected to appear in September 1995.  
Authors should submit their manuscripts

at the conference at the latest. Instructions for authors are given at the end of this circular.

### **GENERAL INFORMATION**

Conference flow is given below. Registration starts at 12.00 pm on Sunday 8, 95 (Le Meridien Hotel Heliopolis). The scientific sessions of the meeting start on Monday morning, 9 January and ends on Saturday, 14 January.

### **ACCOMMODATION**

A block of rooms has been reserved to accommodate the conference participants at Le Meridien hotel at reduced Rates. Rates per person/night - Breakfasts, Lunches and Refreshments at Breaks will be provided. Taxes and service inclusive. A hospitality desk will be available at Le Meridien Hotel for the convenience of the delegates to offer wide range of assistance. Hotel reservation cannot be confirmed without receiving one night deposit.

A shuttle bus service is available (free of charge) from/to the Airport. To facilitate picking you up from the Airport, please send us full details about your flight to Cairo (one week before arrival, at least).

A representative of Ain Shams University will meet, welcome and assist Conference attendees inside Cairo

Airport, through passport and custom formalities, provide visa (on the spot) if necessary. (All Egyptian consulates grant entry visas without restrictions).

### **\* Confirming Reservation**

As soon as possible we will send a receipt of the payment and the voucher for the booked Hotel. Please send us a copy of the Bank Transfer Document.

### **INTERNATIONAL TRAVEL**

Egypt Air has been appointed official carrier to the Conference. Please contact the nearest Egypt Air office in your country. The organisers request that all persons travel by Egypt Air.

### **CLIMATE AND CLOTHING**

Cairo invites you to come and enjoy its beautiful weather and shining sun. The climate is dry all the year round. In January, the cool season, the temperature ranges between 8-18 C. Medium weight clothing, and possibly a top coat would be suitable. For Welcome Reception and Banquet, Jacket and tie/Cocktail dress are preferable. There is no formal dress for the day functions.

### **SOCIAL EVENTS AND EXCURSIONS**

Egypt has immense tourist potentials making it a touristically- attractive State of the first type.

A full programme of social events is planned for all attendees (free of charge), to include: Welcome Reception/Dinner: Sunday 8 January. Wednesday 11 January is being set aside for organised excursion to the Egyptian Museum of Antiquities, Pyramids of Giza and Sphinx & Sound and Light Show at the Pyramids.

There will in addition be a full programme of daytime events for the accompanying persons, include tours to visit some touristic landmarks in Cairo and Giza: Memphis and Sakkara, Citadel, Mohamed Ali Mosque, Khan El-Khalili Bazaars, Tower of Cairo, Coptic Museum etc. Details of all events will be available upon arrival.

### CONFERENCE BANQUET

Friday evening January 13, Oriental Evening: Egyptian traditional music and entertainments will be provided; (Tickets : \$60 US).

### PRE/POST-CONFERENCE TOURS

We are not going to organise any pre/post-conference tours. However, for private reservation and information

concerning tours, we recommend you directly contact American Express of Egypt, Ltd, main office 21 Giza Street, Nile Tower, Giza, Egypt, Tel: (+202) 5703159 or 5703411. Group rate is expected to be given for a group which consists of 10 members at least.

### Notes on the Preparation of Papers

Authors wishing to have papers published in the Proceedings should submit three sets (one original and two copies) of the paper to the Chairman of the Conference at the Conference.

**Typescript:** Papers should be typed double spaced with ample margin on all sides. This also applies to the abstract, tables, figure captions and the list of references which are to be typed on separate sheets.

**Title Page:** 1- The title of the paper must be short and contain words useful for indexing. 2- The names with initials of authors and the name and address of the institution where the work was done must be given. 3- An abbreviated running title of not more than 50 letters and spaces must also be given.

**Abstract.** All papers must have an abstract of not more than 200 words of

the significant results reported in the paper. Presentation of numerical results should be avoided as far as possible in the abstract.

**Keywords.** Between 3 and 6 keywords must be provided for indexing and information retrieval.

**The Text.** The paper must be divided into sections starting preferably with 'Introduction' and ending with 'Conclusions'. The main sections should be numbered 1,2, etc. Subsections 1.1, 1.2, etc. and further subsections 1.1a, 1.1b, etc.

**Tables.** All tables must be numbered consecutively in Arabic numerals in the order of appearance in the text. They should be self-contained and have a descriptive title.

**Figures.** All figures including photographs should be numbered consecutively in Arabic numerals in the order of appearance in the text. Figure captions must be typed on a separate sheet. Line drawings must be in India ink on good quality tracing paper or on white card of a size smaller than that of the text paper. Structural formulae of compounds must be drawn in India ink on tracing paper. Lines must be drawn sufficiently thick for reduction to a half or third of the original size (0.3 mm for axes and 0.6 mm for curves are suggested).

**References.** Should be stated in the text

by author and year. If there are more than two authors, reference should be to the first author followed by et al in the text. References at the end of the paper should be listed alphabetically by authors names, followed by initials, year of publication, name of the journal (abbreviated according to the world list of scientific periodicals, Butterworths, London), volume number, and number of the first page. References to books should include: name(s) of author(s), initials, year of publication, title of the book, edition if not the first, initials and name(s) of editor(s) if any, preceded by ed(s), place of publication, publisher and chapter or pages referred to. References to thesis must include the year, the title of the thesis, the degree for which submitted and the university. References to reports and unpublished conference proceedings should include the title of the report/paper.

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### FOR FURTHER INFORMATION CONTACT

**Prof. Abdel-Mottaleb, M.S.A.**  
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FACULTY OF SCIENCE  
AIN SHAMS UNIVERSITY  
ABBASSIA, CAIRO, EGYPT  
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ALL THE TIME  
BITNET:  
SOLAR@EGFRCUVX.BITNET  
E-MAIL : SOLAR@FRCU.EUN.EG  
FAX: +2 02 8222 84

### CONFERENCE FLOW (TENTATIVE)

Date	Morning 08.30-12.30	Afternoon 14.00-18.00	Evening
<b>Sunday</b>	<b>Registration</b>	<b>Opening Remarks</b>	
<b>8 January</b>		<b>Invited Lectures</b>	
		<b>Reception</b>	
<b>Monday</b>	<b>Invited Lectures</b>	<b>Invited Lectures</b>	
<b>9 January</b>	<b>Poster I</b>		
<b>Tuesday</b>	<b>Invited Lectures</b>	<b>Invited Lectures</b>	
<b>10 January</b>	<b>Poster II</b>		
<b>Wednesday</b>	<b>MUSEUM OF ANTIQUITIES, PYRAMIDES</b>		
<b>11 January</b>	<b>AND SPHINX</b>		
<b>Thursday</b>	<b>Invited Lectures</b>	<b>Invited Lectures</b>	
<b>12 January</b>	<b>Poster III</b>		
<b>Friday</b>	<b>Invited Lectures</b>	<b>BANQUET</b>	
<b>13 January</b>	<b>Poster IV</b>		
<b>Saturday</b>	<b>Invited Lectures</b>		
<b>14 January</b>	<b>Closing Remarks</b>		
<b>Coffee/Tea:</b>		10.10-10.40	15.40-16.10
<b>Lunch:</b>		12.30-14.00	

Participants will receive a detailed schedule of the Conference events upon arriving at the Conference.

**Last minute registration may be also accepted. Please contact the chairman immediately.**

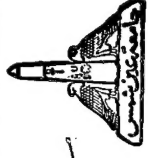
Prof. ABDEL-MOTTALEB, M.S.A.

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علوم عين شمس